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EXAMINER

EKONG, EMEM

ART UNIT	PAPER NUMBER
2617	

2617

SHORTENED STATUTORY PERIOD OF RESPONSE*	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/07/06 has been entered.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1, 3-6, 9, 11-14, and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 20030224855 A1 to Cunningham in view of U S Patent No. 6160804 to Ahmed et al. (Ahmed).

**Regarding claim 1**, Cunningham discloses a method of dynamically detecting a location of a mobile node, comprising: accessing static information pertaining to the mobile node from a configuration database (par. 58 lines 26-27); accessing dynamic information pertaining to the mobile node when the mobile node starts up (pars. 32-35, 58 lines 21-25, and par. 63); examining the static information and dynamic information pertaining to the mobile node (par. 58); selecting a location module based on the information, the location module comprising an appropriate methodology to dynamically determine the mobile node's location (par. 59).

However, Cunningham fails to disclose determine the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ.

In a similar endeavor, Leung discloses determining the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ (pars. 14-18, 28-29, 32, and 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ as disclosed by Leung for the purpose of detecting position of the mobile devices for registration in the case of roaming.

**Regarding claim 9**, Cunningham discloses an article comprising a machine-accessible medium having stored thereon instructions that, when executed by a mobile node (pars. 55), cause the mobile node to: access static information pertaining to the mobile node from a configuration database (par. 58 lines 26-27); access dynamic information pertaining to the mobile node when the mobile node starts up (par. 58 lines 21-25, and 63); examining the static information and dynamic information pertaining to the mobile node (par. 58); select a location module based on the information, the

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location module comprising an appropriate methodology to dynamically determine the mobile node's location; and executing the location module to determine location of mobile node (par. 59).

However, Cunningham fails to disclose determine the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ.

In a similar endeavor, Leung discloses determining the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ (pars. 14-18, 28-29, 32, and 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining the mobile node's location with respect a corporate demilitarized zone ("DMZ"); and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ as disclosed by Leung for the purpose of detecting position of the mobile devices for registration. 33

**Regarding claim 17**, Cunningham discloses a mobile node capable of dynamically determining its location (see figure 5), comprising: a memory capable of storing a configuration database containing static information pertaining to the mobile node (pars. 47-52), the memory further capable of storing dynamic information obtained when the mobile node starts up (pars. 10, and 38); and a processor capable of

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executing an appropriate location module selected by a policy engine (par. 55, i.e. position determination module 515, microprocessor 525), the appropriate location module selected by the policy engine based on the static information and the dynamic information, the location module comprising an appropriate methodology to dynamically determine the mobile node's location (pars. 58-59).

However, Cunningham fails to disclose determine the mobile node's location with respect a corporate demilitarized zone ("DMZ") separating an internet from an external network.

In a similar endeavor, Leung discloses determining the mobile node's location with respect a corporate demilitarized zone separating an internet from an external network (pars. 14-18, 28-29, 32, and 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining the mobile node's location with respect a corporate demilitarized zone separating an internet from an external network as disclosed by Leung for the purpose of detecting position of the mobile devices for registration.

**Regarding claims 3-6, 11-14, and 18-22**, the combination of Cunningham and Leung discloses the method, an article, and a mobile node according to claims 1, 9, and 17 further comprising deciding whether to retain the location module based on the dynamic information;

wherein deciding whether to retain the location module further comprises selecting an alternate location module if the dynamic information indicates the alternate location module is more suitable;

wherein applying the location module further comprises causing the mobile node to execute instructions in the location module;

wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to register with an internal home agent and an external home agent;

wherein the processor is further capable of causing the policy module to select a first location module based on the static information in the configuration database, and wherein the processor is further capable of causing the policy engine to determine whether to retain the first location module (Cunningham, see figure 6, and pars. 55-58)

7. Claims 7, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Leung, and further in view of U. S. Publication No. 2004/0037260 A1 to Kakemizu et al..

**Regarding claims 7, 15, and 23**, the combination of Cunningham and Leung discloses the method according to claim 5, however, the combination fails to disclose wherein causing the mobile node to execute instructions in the location module further comprises examining a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name.



Kakemizu et al. discloses wherein causing the mobile node to execute instructions in the location module further comprises examining a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name (par. 122).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, by causing the mobile node to execute instructions in the location module further comprises examining a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name as disclosed by Kakemizu et al. for the purpose of having different addresses as mobile node roams on different network.

8. Claims 8, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Leung, and further in view of U. S. Publication No. 2006/0018296 A1 to Mukaoka et al..

**Regarding claims 8, 16, and 24**, the combination of Cunningham and Leung discloses the method according to claim 5, however, the combination fails to disclose wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to compare its care of address ("COA") against a CIDR block address in a configuration database.

Mukaoka et al. discloses compare its care of address ("COA") against a CIDR block address in a configuration database (pars. 0125-128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, by comparing the address ("COA")

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against a CIDR block address in a configuration database as disclosed by Mukaoka et al. for the purpose of updating the database.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571 272 7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EE  
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